

WE CLAIM:

1. A battery pack for powering a hand-held portable electronic device, comprising:

a generally rectangular battery cell, the battery cell having an upper surface and a lower surface, the battery cell having a length, a width, and a thickness suitable for insertion into the hand-held portable device;

a battery cell casing enclosing an outer perimeter of the battery cell, whereby the casing has a width equal to the thickness of the battery cell; and

a pair of locking latches for latching the battery pack to the hand-held portable electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the battery cell, and a second locking latch of said pair of locking latches is defined along a second side of the battery cell opposite the first locking latch.

2. The battery pack of Claim 1, further comprising a locking latch catch defined along an outer edge of each of the first and second locking latches for engaging first and second latching detents defined within the interior casing of the hand-held electronic device for securing the battery pack within the electronic device.

3. The method of Claim 1, whereby the locking latches are attached to and integrated with the battery cell casing.

4. The method of Claim 1, wherein the first and second locking latches comprise an elongate member having a first end and a second end whereby the first end is attached to a portion of the battery cell casing and whereby the second end is attached to the battery cell casing in spaced-apart relation from the first end such that a clearance is formed between an inner surface of the locking latch member and an outer surface of the battery cell casing between a connection point of the first end to the battery cell casing and a connection point of the second end to the battery cell casing.

5. The battery pack of Claim 4 whereby the locking latches are deformable such that the locking latches may be formed inward toward the outer surface of the casing between the connection point of the first end to the battery cell casing and the connection point of the second end so that the outer surface of the locking latches and the locking latch catches may pass by an inner surface of the detents.

6. The battery pack of Claim 1, further comprising an electrical battery contact disposed along the outer perimeter of the battery cell for electrical contact with a mating contact defined within the interior of the portable electronic device.

7. The battery pack of Claim 1, wherein the battery pack has a length of about 90 millimeters.

8. The battery pack of Claim 1, wherein the battery pack has a width of about 40 millimeters.

9. The battery pack of Claim 1, wherein a thickness of about 4.5 millimeters.

10. The battery pack of Claim 1, wherein the battery cell casing preferably constructed from a polycarbonate material.

11. The battery pack of Claim 1, whereby the portable electronic device is a wireless telephone.

12. The battery pack of Claim 1, whereby the portable electronic device is a hand-held computer.

13. The battery pack of Claim 1, whereby the portable electronic device is a personal digital assistant.

14. The battery pack of Claim 1, wherein the battery cell includes a lithium ion battery cell.

15. The battery pack of Claim 1, wherein the battery cell includes a lithium polymer battery cell.

16. A portable electronic device and battery pack combination, comprising:  
the portable electronic device including;

a generally rectangular battery compartment for receiving a battery pack for powering the electronic device, the battery compartment including a battery support structure for supporting a battery pack after the battery pack is inserted into the electronic device, wherein the battery support structure includes a pair of spaced-apart latching detents for securing the battery pack to the electronic device; and

the battery pack including;

a generally rectangular battery cell, the battery cell having an upper surface and a lower surface, the battery cell having a length, a width, and a thickness suitable for insertion into the portable electronic device;

a battery cell casing closing an outer perimeter of the battery cell, whereby the casing has a width equal to the thickness of the battery cell; and

a pair of locking latches for engaging the latching detents for attaching the battery pack to the electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the battery cell casing, and a second locking latch of said pair of locking latches is defined along a second side of the battery cell casing opposite the first locking latch.

17. The battery pack of Claim 16, further comprising a locking latch catch defined along an outer edge of each of the first and second locking latches for engaging first and second latching detents of the pair of spaced-apart latching detents defined within the interior casing of the hand-held electronic device for securing the battery pack within the electronic device.

18. The battery pack of Claim 17 whereby the locking latches are deformable such that the locking latches may be formed inward toward the outer surface of the casing between the connection point of the first end to the battery cell casing and the connection point of the second end so that the outer surface of the locking latches and the locking latch catches may pass by an inner surface of the detents.

19. The battery pack of Claim 16, wherein the battery cell includes a lithium ion battery cell.

20. The battery pack of Claim 16, wherein the battery cell includes a lithium polymer battery cell.